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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,168	12/13/2001	Michael D. James	GB 000182	3955

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EXAMINER

POWERS, WILLIAM S

ART UNIT PAPER NUMBER

2134

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,168

Applicant(s)

JAMES, MICHAEL D.

Examiner

William S. Powers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 8-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/24/05 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-22 have been examined. Claims 1-5 and 8-10 have been amended. Claims 6 and 7 have been cancelled. Claims 11-22 have been added.

Drawings

2. The objections to figures 1 and 2 are withdrawn in light of the applicant amendments.
3. The objections to figures 4 and 5 stand as the objections have not been addressed. Figures 4 & 5 fail to comply with 37 CFR 1.84(p)(4) because reference character "86" has been used to designate both "radio frequency LAN interface" (figure 4) and "local area network" (figure 5).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of

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any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Appropriate correction is required.

Specification

4. In view of the applicant's amendments, all objections to the specification are withdrawn.

Claim Objections

5. In view of the applicant's amendments, all previous claim objections are withdrawn.

6. Claim 9 is objected to because of the following informality: As to claim 9, there are two transitional phrases, "including" (page 6, line 14 of the amended claims) and "comprising" (page 6, line 17 of the amended claims), which do not clearly separate the claim preamble, the transitional phrase and the claim body. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 18 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitations of "local apparatus" and "further apparatus" are indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5, 8-10, 13-19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,886,732 to Humpleman in view of U.S. Patent No. 6,038,625 to Ogino, further in view of U.S. Patent No. 6,826,699 to Sun.

As to claims 1, 8, 9, 10 and 18, Humpleman and Ogino do not teach the sharing of authentication data between devices, Humpleman teaches a digital network with digital televisions that decode digital signals (Humpleman, column 7, lines 29-48), the use of a network interface unit that handles the authentication process of communication services, such as video on demand, in the form of credit card number or

user password (Humbleman, column 9, lines 43-49) and the ability to view restricted access programming on a digital television of user's choosing by transmitting data over said network (Humbleman, column 10, lines 52-61). However, Humbleman does not explicitly disclose direct communication between digital televisions.

Ogino teaches a peer-to-peer network that comprises smart televisions that have the ability to transmit data with each other over an IEEE 1394 serial communications bus in order "to control one another and obtain information regarding one another" (Ogino, column 2, lines 55-57). This simplifies the coordination of various audio/visual components that make up a home entertainment network (Ogino, column 2, lines 59-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the invention of Humbleman with the communications between devices of Ogino to simplify the coordination of various audio/visual components that make up a home entertainment network (Ogino, column 2, lines 59-65).

Humbleman and Ogino do not specifically teach a security protocol for transmission of data including authentication data and encryption key exchange within the local network.

Sun teaches the use of 5C Digital Transmission Content Protocol authentication and key exchange, 5C DTCP AKE (Sun, column 6, lines 45-50), in a peer-to-peer network (Sun, column 6, lines 15-30) that uses an encryption key to verify the legal accessibility to the data transmitted over the local network (Sun, column 9, lines 27-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the invention Humpleman and Ogino with the added network security features, as disclosed by Sun, to protect the transmitted data from unauthorized users.

As to claim 2, Humpleman teaches a network that distributes digital television signals to television sets (column 3, lines 62-67).

As to claim 3, Humpleman teaches a network that uses hybrid coaxial cables as a transmission medium (column 6, lines 53-60) and filters (column 8, lines 60-64). Humpleman further teaches that the cables can transmit analog television signals, which are within the RF spectrum (column 3, lines 3-7).

As to claim 4, Sun teaches the use of 5C Digital Transmission Content Protocol authentication and key exchange, 5C DTCP AKE (Sun, column 6, lines 45-50).

As to claim 5, Humpleman teaches that each television has its own decoder (column 7, lines 39-43).

As to claims 13 and 22, Humpleman teaches a network with "any number" of television sets (Humpleman, column 10, lines 28-36).

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As to claims 14, 17 and 19, Humpleman teaches the use of restricted access television programming at an individual apparatus (Humpleman, column 10, lines 41-61).

As to claim 15, Humpleman teaches a network with "any number" of television sets (Humpleman, column 10, lines 28-36) and Sun teaches a peer-to-peer communication network (Sun, column 6, lines 15-30).

As to claim 16, Humpleman teaches the use of two demultiplexers to separate the incoming data streams (column 7, lines 29-59).

9. Claims 11, 12, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,886,732 to Humpleman in view of U.S. Patent No. 6,038,625 to Ogino, further in view of U.S. Patent No. 6,826,699 to Sun as applied to claim 1 above, in still further view of U.S. Patent Application No. 2001/0030959 to Ozawa et al. (hereafter referred to as Ozawa).

As to claim 11 and 20, Humpleman teaches a network interface module that decrypts incoming transmissions and handles access control (Humpleman, column 7, lines 49-59) and Sun teaches a peer-to-peer network (Sun, column 6, lines 15-30), but does expressly mention a smart card.

Ozawa teaches the use of a smart card in a set top box in order to "provide the key for decoding incoming cryptographic data for content that the CAM [smart card] determines the user is authorized to receive" (Ozawa, page 3, paragraph 31).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of Humpleman, Ogino and Sun with the smart card of Ozawa in order to "provide the key for decoding incoming cryptographic data for content that the CAM [smart card] determines the user is authorized to receive" (Ozawa, page 3, paragraph 31).

As to claim 12 and 21, Humpleman teaches a network (Humpleman, column 3, lines 1-27), but does not expressly mention a radio frequency network.

Ozawa teaches a wireless radio frequency network (Ozawa, page 2, paragraph 21) in order to transmit data in an efficient manner (Ozawa, page 1, paragraph 4).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of Humpleman, Ogino and Sun with the wireless radio frequency network of Ozawa in order to transmit data in an efficient manner (Ozawa, page 1, paragraph 4).

Response to Arguments

10. Applicant's arguments filed August 24, 2005 have been fully considered but they are not persuasive.

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11. Regarding claims 1 and 9, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding claim 1, Humpleman teaches the use of authorization data at a central network interface module (Humpleman, column 9, lines 38-58) and Ogino teaches an interconnected peer-to-peer network. The nodes of the network communicate in order "to control one another and obtain information regarding one another" (Ogino, column 2, lines 55-57). The combination of these two references overcomes the limitations of the arguments.

Regarding claim 9, Humpleman teaches the demultiplexing of an incoming signal into its component parts for decoding at the set top box (column 7, lines 29-48).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William S. Powers, whose telephone number is (571) 272-8573. The examiner can normally be reached Monday-Thursday from 8 AM – 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse, can be reached at (571) 272-3838.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
PO Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (886) 217-9197 (toll-free).

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October 31, 2005


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